

# First Alert®

## PRO SERIES

### H.264 DIGITAL DVR

#### QUICK INSTALL GUIDE

#### MODELS

**PRO-DC8810-520** 8 Channel/8 Cameras

**PRO-DC8410-520** 8 Channel/4 Cameras



**H.264**  
VIDEO  
COMPRESSION

**REC**  
DIGITAL DVR  
RECORDER

  
MOBILE PHONE/  
WEB READY

**1.0TB**  
DVR OPTIMIZED  
SATA HDD

  
INDOOR/OUTDOOR  
520 TVL CAMERAS

  
NIGHT  
VISION

### WHAT'S IN THE BOX

PRO-D810 H.264  
8 Channel Digital DVR  
with 1TB Hard Drive



PRO-CM520 520 TVL Camera  
PRO-DC8810-520: 8 Cameras  
PRO-DC8410-520: 4 Cameras



2 Window  
Warning Decals



Quick Install Guide



Installation Software  
and Manuals



USB 2.0 Mouse



Remote Control



RJ45 Ethernet Cable  
(cable color may be different)



Power Supply for  
DVR and Cameras



60' BNC Video & DC Power Cable  
PRO-DC8810-520: 8 Cables  
PRO-DC8410-520: 4 Cables

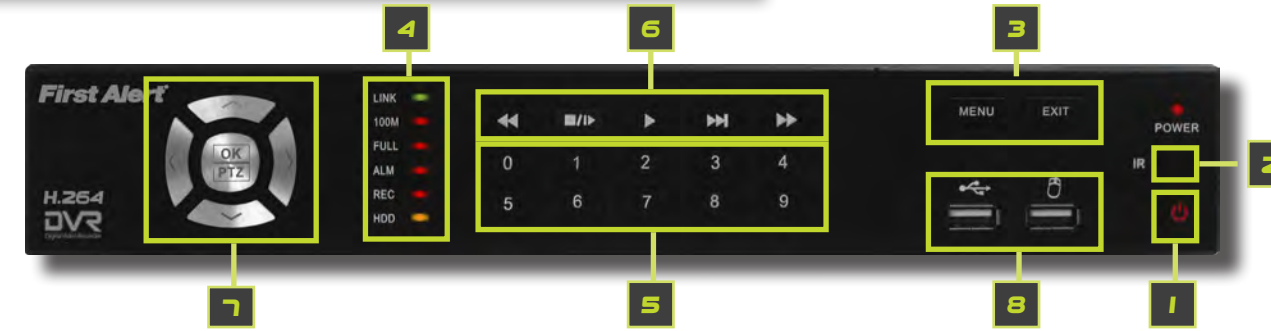


9-way Power splitter -  
8 cameras, 1 DVR

### About this Quick Start Guide

Thank you for choosing First Alert for your security needs! This Quick Start Guide is designed to provide you with the basic operation of your PRO-D810 DVR which is included in the PRO-DC8810-520 and the PRO-DC8410-520 security kits. Please consult the complete User's Manual included on the CD disk for a detailed explanation of all the features and functions of this DVR. We also encourage you to visit our website at [www.brkelectronics.com](http://www.brkelectronics.com) to check for the latest manuals (English and Spanish), firmware updates, downloads, other security camera products and announcements. You'll find this product line under Products >> Security Cameras >> Wired Cameras.

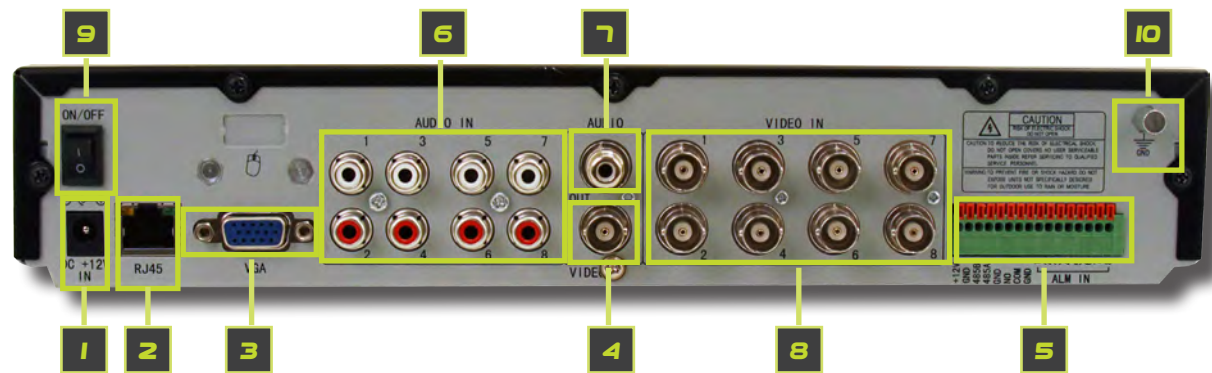
### FRONT PANEL



ITEM	FUNCTION	CONTROL	DESCRIPTION
1	Standby		Press to enter standby mode
2	IR Sensor		IR receiver for the remote control
3	MENU/EXIT		Press to open/close the main menu
4	LED Indicators		Shows status of Link, 100M, Full, Alarm, Record, HDD.
5	Channel Numbers/ Playback	0-9	Press buttons 1~8 to view the selected channel in full-screen
6	During playback, press the following:	⏪	Increase reverse playback speed 2X, 4X, 8X
		⏸	Press to freeze playback to one frame, then press again to advance frame-by-frame
		▶	Press to start playback
		⏩	Press to slow playback speed by 1/2, 1/4, 1/8
		⏭	Press to increase forward playback speed 2X, 4X, 8X
7	Navigation/OK/PTZ (Select direction arrow, then press OK to start PTZ motion)	OK/PTZ	In menus, press to confirm selections; in PTZ mode, press to change the navigation buttons to control the connected PTZ camera (not included)
		▲	Press to move cursor up; in PTZ mode, press to pan camera up
		▼	Press to move cursor down; in PTZ mode, press to pan camera down
		◀	Press to move cursor left; in PTZ mode, press to pan camera left
		▶	Press to move cursor right; in PTZ mode, press to pan camera right
8	USB	USB	Connect a USB flash drive to the left port for data backup and firmware upgrades. Connect a USB mouse to the right port



### BACK PANEL



ITEM	FUNCTION	DESCRIPTION
1	POWER Input	DC 12V/5A power connection
2	Network	For connecting RJ45 ethernet cable to PC or router
3	VGA Output	For connecting to a VGA monitor
4	Video Output	For connecting to a BNC monitor (800 x 600)
5	Alarm Input	8 alarm inputs
	Alarm Output	Output for alarm
	RS485	For connecting PTZ cameras
	+12V	Power supply for alarm block inputs, the current is 100mA (to prevent short circuits)
6	Audio Input	For connecting audio signal from audio capable cameras or self powered microphones (RCA jacks)
7	Audio Output	For connecting audio signal to amplified speakers (RCA jacks)
8	Video Input	For connecting video signal from cameras (BNC)
9	Power Switch	Power On/Off
10	Ground	Ground connection

### REMOTE CONTROL

#### Remote Control Operation

The remote control is the secondary input device for navigating the system's interface. In device operation, the OK key has the same function as "left click" of the mouse.

ITEM	FUNCTION	DESCRIPTION
1	STANDBY	Press to turn standby mode ON/OFF
2	LOGIN/LOCK	If "Security" has been enabled in the setup menu, press to open the user password login screen or log off system.
3	Number/Channel Buttons	While in menus, press buttons 0~9 to enter values; during live viewing, press to view channels in full-screen
4	Window Display	Press to switch between quad and split-screen displays
5	MENU	Opens the main menu
6	PTZ	Press to open the PTZ control window
7	EXIT	Close menu windows
8	Navigation/OK	In menus, press to confirm selections; in PTZ mode, press to change the navigation buttons to control the connected PTZ camera (not included)
		Press to move cursor up; in PTZ mode, press to pan camera up
		Press to move cursor down; in PTZ mode, press to pan camera down
		Press to move cursor left; in PTZ mode, press to pan camera left
	Press to move cursor right; in PTZ mode, press to pan camera right	
9	+ / -	In menus, press to adjust values
10	RECORD	Press to start manual recording
11	STOP	Press to stop manual recording
12	EXTRA	For future use
13	Playback Controls	Increase reverse playback speed 2X, 4X, 8X
		Press to freeze playback to one frame, then press again to advance frame-by-frame
		Press to start playback
		Press to slow playback speed by 1/2, 1/4, 1/8
		Press to increase forward playback speed 2X, 4X, 8X



**Remote Control**  
**TIP:** When using the remote control to enter password and camera titles, select the field using the navigation buttons, press OK, and then press the number buttons.

**Battery Replacement - Instructions for Use**  
 Always purchase the correct size and grade of battery most suitable for intended use. Replace all batteries of a set at the same time. Clean the battery contacts and also those of the device prior to battery installation. Ensure the batteries are installed correctly with regard to polarity (+ and -). Remove batteries from equipment that is not to be used for an extended period of time. Remove used batteries promptly.



### STEP 1 ... INSTALLING CAMERAS

#### Mounting Cameras and Running Cable

Select the position for the camera and secure the camera stand. Screw the camera onto the stand. Adjust camera to the proper view angle. Make sure the lens is upright relative to the subject. Tighten the thumb bolt. First Alert cameras can be either ceiling or wall mounted by simply reversing the camera stand mounting. See "Camera Orientation" Info box. Holes are provided on both the bottom and back of the camera housing to accommodate most mounting requirements. Run cable from camera to DVR location. See Information box below on "Longer Cable Runs".

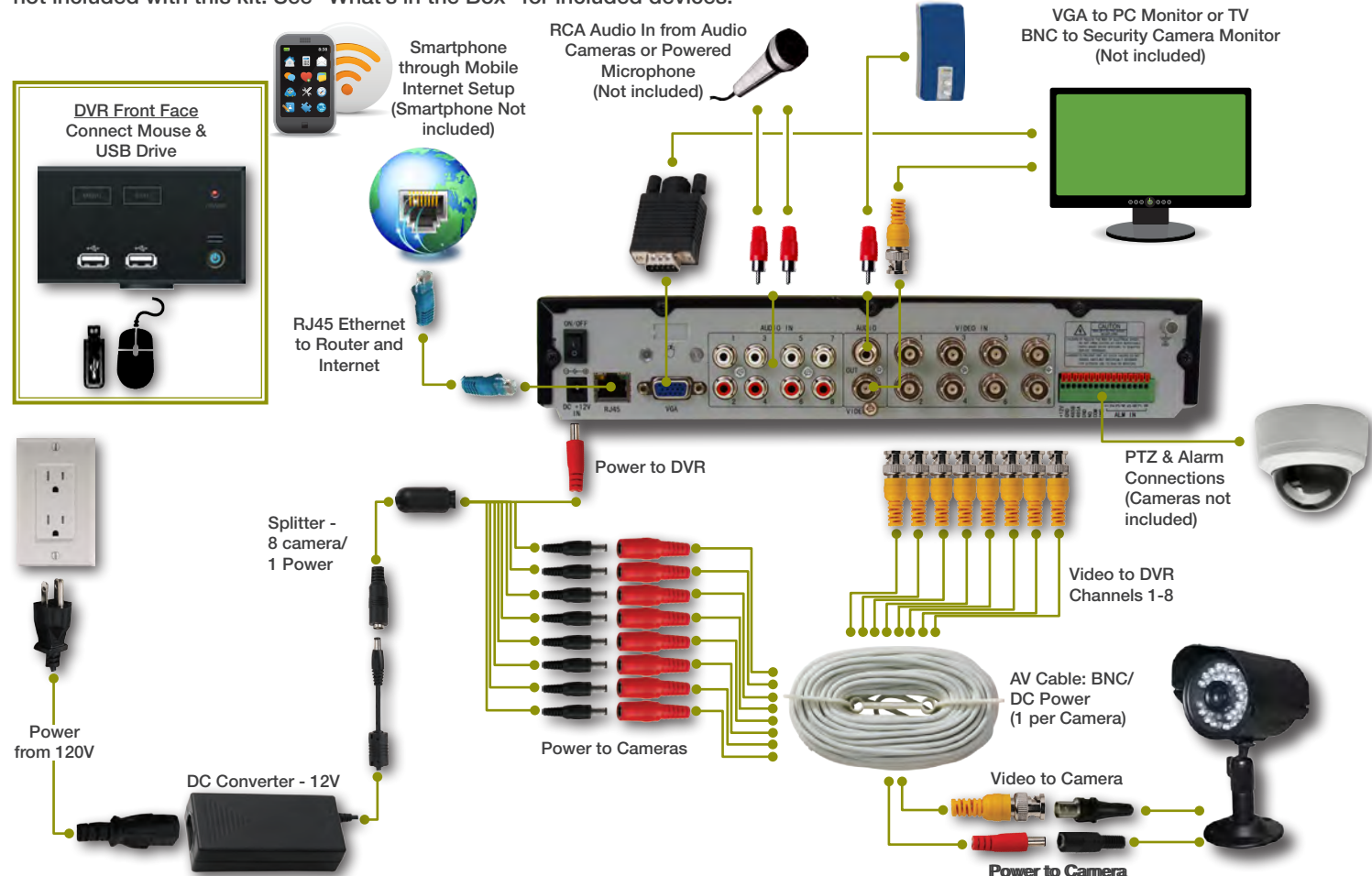


**Camera Orientation**  
It's important the camera is mounted correctly to ensure the image is not upside down as the camera lens can only be positioned one way.

**Longer Cable Runs**  
Longer cable runs may require an upgrade to RG59 Coax cable. First Alert kits ship with economical AV cable that is designed to work well up to the length of cable provided, usually around 60 feet. If longer distances between camera and DVR are required, you will need to upgrade to RG59 Coax cable. We provide several lengths up to 300 feet. In addition, if you need to run cable for in-wall installations, then you may require fire rated cable, FT-4/CMR UL approved for in-wall installations.

### STEP 2 ... CONNECTING DEVICES

Follow this diagram to make device connections. Note, some devices are not included with this kit. See "What's in the Box" for included devices.



### STEP 3 ... SYSTEM START UP

#### Power On/Off

To power the system On/Off, connect the power cable to the DC 12V port on the rear panel. Flip the toggle switch on in the back of the DVR. At startup, the system performs a basic system check and runs an initial loading sequence. After a few moments, the system loads a live display view.

#### Default Video Output

The default video output for the DVR system is VGA. If you connect a BNC (CVBS) monitor on initial setup, you will need to use the mouse "Scroll Wheel" to switch to the BNC output to be able to use the mouse. Roll the mouse "Scroll Wheel" backward to go to BNC and forward to go to VGA. The REMARK screen is shown on startup.

#### Password

ATTENTION: By default, passwords are disabled on the system. You do not need to enter a password when accessing any system menus. However, for security purposes, it is highly recommended to enable passwords on the system using the Password Menu. See "Password" section for details on setting up passwords. Click APPLY to access the menus or click EXIT to cancel password setup and return to the LIVE VIEW screen.

#### Standby Mode

The system can also be put into Standby Mode. Power will remain to the system but will not be recording. To start/stop Standby Mode:

1. Press and hold the POWER button on the front panel or remote control until the prompt closes. The system enters standby mode. You can also enter Standby mode through the Quick Access Menu. See below.
2. To exit standby mode, press and hold the POWER button on the front panel or remote control until the system beeps. The system will begin powering up.

#### Main Menu Access

To open the Main Menu: Right-click anywhere on-screen to open the Quick Access Menu and select MAIN MENU (mouse only), or press the MENU button on the remote control or front panel of the system.



Quick Access Menu

#### Quick Access Menu

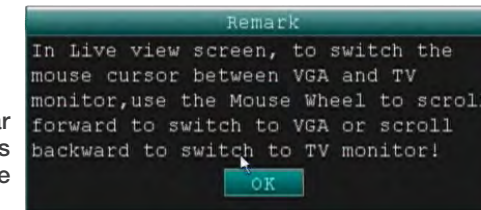
When using the mouse, use the Quick Access Menu to access several system options, including the Main Menu. Select one of the following options:

- MAIN MENU: Opens the main system menu
  - KEYLOCK: Logs current user off the system. Re-login required.
  - CHN SWITCH: Select type of split-screen display
  - VIDEO SEARCH: Open the Search Menu to view recorded video
  - PTZ : Opens the PTZ control menu
  - MUTE: Mute listen-in audio on the system
  - MANUAL REC: Start manual recording
  - STOP REC: Stop manual recording
  - ROTATION: Video rotation
  - START CRUISE: Click to start preset PTZ Camera motion
  - STOP CRUISE: Click to stop preset PTZ Camera motion
- To close the Sub-Menu, click anywhere on-screen.

NOTE: If passwords are enabled on the system, you need to select your Device ID and enter the 6-digit numerical password to open the Main Menu.

#### Main Menu

1. RECORD SEARCH: Search for recorded video on the system.
2. RECORD: Configure recording parameters (quality, resolution), set record modes, and enable/disable audio recording. Note: Audio capable cameras (not included) are required for audio recording on the system.
3. HDD: Display hard drive status and format the internal hard drive of the system.
4. BASIC: Open the Basic Setup Menu, which lets you set the system language, date and time, device IDs and passwords, and configure display, audio and video settings.
5. ADVANCED: Opens the Advanced Setup Menu. You can view system info, configure alarm, PTZ, motion detect, maintenance, mobile, and network settings.
6. EXIT: Closes the Main Menu.
7. Displays information about the contents of the selected Main Menu icon.



Switch between VGA to BNC Output



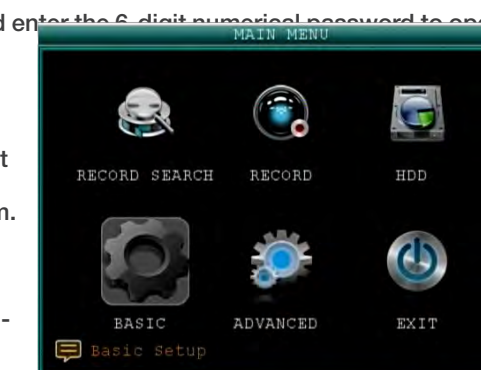
User Login Menu

**No HDD installed**  
NOTE: If there is no HDD installed, or the HDD is not recognized, or the HDD is not formatted

it will display a red [H] in the video preview interface. You must format the HDD in the DVR before first use. See: Menu > HDD management > Format. After formatting, the system will restart.



Main Viewing Screen Showing No HDD in DVR



Main Menu



### STEP 4 ... LANGUAGE, DATE AND TIME

#### Setting Up Language/Date/Time

Set the system language, date and time, passwords, and configure audio and display options. The Basic Setup Menu contains the following sub-menus: Language, Date/Time, Password, Display, and Video/Audio.

#### Language

To change the system language, from the drop-down menu select LANGUAGE. Click APPLY. Click CLOSE in the confirmation window. Click EXIT to close the menu.

NOTE: The system will restart when you finish system language setup. The default is English.



Basic Setup Menu

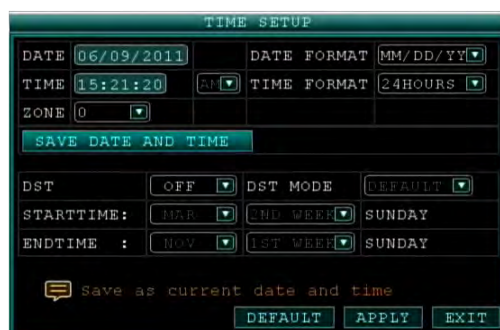


System Language Menu

#### Date/Time

It is highly recommended to immediately set the date and time when first setting up your system. To set the date and time:

- Click DATE/TIME and configure the following options:
  - DATE: Enter the day, month, and year.
  - DATE FORMAT: Select DD/MM/YYYY, MM/DD/YYYY, or YYYY/MM/DD
  - TIME: Enter the time
  - TIME FORMAT: Use the drop-down menu and select 12HOURS or 24HOURS. If 12HOURS is selected, then set AM or PM.
  - DST: Use the drop-down menu to select ON/OFF to enable/disable Daylight Savings Time. See below for details on setting DST.
- Click ZONE to enter your time zone from -12 to +12. To find your time zone visit [www.worldtimezone.com](http://www.worldtimezone.com) or other similar sites. See Info box for US codes.
- Click SAVE DATE AND TIME. The new date and time are saved. Click EXIT.



System Time/Date Setup

#### Daylight Savings Time (DST)

To set daylight savings time:

- Under DST, select ON. DST options appear.
- Under DST MODE select one of the following:
  - DEFAULT: The Default setting will apply the United States daylight savings time period from the second Sunday of March to the first Sunday in November (go to step 3)
  - CUSTOM: Set customized start and end times for DST (go to step 4)
- If using the DEFAULT, click APPLY. Click EXIT.
- If setting a CUSTOM DST, use the drop-down menus to select a week and month for the start and end times.
- Click APPLY. Click CLOSE in the confirmation window.
- Click EXIT in each menu until all windows are closed.



#### Why Set a Date & Time?

It's important to set the proper date and time before continuing so that you can easily locate recorded events. Inaccurate dates and times on files may affect their admissibility as evidence in court. In addition, when changing current time settings, to avoid possible confusion with the time stamps on recorded and currently recording files, stop all ongoing recording processes before altering the system time and restart recording using the new settings.



#### US World Time Zones - UTC Codes

UTC stands for Universal Time Coordinates or Greenwich Mean Time (GMT)

- Eastern: -5
- Central: -6
- Mountain: -7
- Western: -8
- Alaska/Hawaii: -9 through -11

### STEP 5 ... CAMERA DISPLAY SETUP

#### Setting Up Cameras for Viewing and Recording

Use the Display Setup menu to customize channel titles, show/hide the date and time in live viewing and playback, and enable/disable preview channels. To customize Display settings, click BASIC from the Main Menu, then click DISPLAY:

#### Display

- Configure the following options:
  - NAME: Click any of the fields and enter a new title for the selected channel using the Virtual Keyboard (mouse only)
  - POSITION: Reposition the channel title; select TOPLEFT, BOTTOMLEFT, TOPRIGHT, BOTTOMRIGHT, or OFF. If OFF, the title will not be displayed for the selected channel
  - COLOR: Adjust CHROMATICITY, LUMINOSITY, CONTRAST, and SATURATION for the selected channel
  - LIVE: This feature can be very useful if your display monitor is in public view. With LIVE in the OFF selection that channel will appear black on the display to give the impression that no cameras are connected and the system is not recording. Select ON/OFF to enable or disable this feature
  - PREVIEW TIME: Select ON/OFF to show/ hide the date and time during live viewing
  - RECORD TIME: Select ON/OFF to show/hide the date and time during playback.
- Scroll down to change the settings for the remaining channels
- Click APPLY to save your settings. Click OK in the REMARK window. Click EXIT.

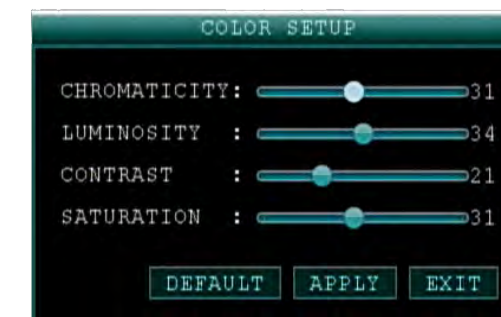


Display Setup Menu

#### Video/Audio

Use the Video/Audio menu to set the resolution and camera setup on the system. To configure Video/Audio options:

- Under VGA RESOLUTION, select 800 x 600, 1024 x 768, 1280 x 1024, 1366 x 768, 1440 x 900.
- Under CAMERA SYSTEM, select NTSC or PAL. (See info box below)
- Under LOOP TIME (SECOND), enter with virtual keypad from 1 to 300
- Under VOLUME SETUP, adjust slider from 0 to 63. Click X to save.
- Under MARGIN, adjust TOP, BOTTOM, LEFT, RIGHT margin with slider from 0 -10. Also adjust Display from VGA or CVBS. Default is VGA and 0 for all margins
- Click APPLY. Click OK in the REMARK window.
- Click EXIT in all menus until all windows are closed.



Color Set-up



Video/Audio Menu



#### Audio/Video Recording

Caution: Audio surveillance in some states is illegal or requires permission from one or both parties to record someone's voice. Laws are also different from residential vs. commercial applications. Some federal, state, and local laws prohibit certain surveillance activities and/or the use or distribution of the information obtained from such activities. Prior to using this system, you should become familiar with the pertinent laws to ensure compliance with those applicable to surveillance activities.



#### NTSC or PAL?

NTSC (National Television Standards Committee) is the video system or standard used in North America and most of South America. In NTSC, 30 frames are transmitted each second. Each frame is made up of 525 individual scan lines.

PAL (Phase Alternating Line) is the predominant video system or standard mostly used overseas. In PAL, 25 frames are transmitted each second. Each frame is made up of 625 individual scan lines.



### BASIC SETUP

Use the BASIC SETUP menu to configure language, date and time settings, password setup, along with display, video and audio settings. You can also exit the system through this menu. The Basic Setup menu contains the following sub-menus: Language, Date/Time, Password, Display, Video/Audio and Exit.

### RECORDING

#### RECORD Mode

##### Configure Recording Options:

In this Menu you have three recording options: POWER UP (Continuous), TIMER RECORD (enables SCHEDULE menu) and ALARM (within SCHEDULE menu). By default, the DVR is set to record continuously. Set parameters as follows:

- From the Main Menu click RECORD. Under SWITCH, use the drop-down menus and select ON/OFF to enable/disable recording from the selected channel. Note: If SWITCH is set to OFF, then Motion Detect, Alarm and Manual Record are also disabled for that channel.
- Under RESOLUTION, select CIF, HD1, or D1.  
NOTE: NTSC: @30fps, PAL: @25fps. Recording capabilities for both NTSC & PAL: Channels 1 & 2: D1, HD1, CIF; Channels 3-8: HD1, CIF.
- BITRATE (Kbps): See table for details.
- FRAMERATE: Choose the recording frame rate 1-30, (fps – frames per second). The lower the value, the less life-like and more jerky the recorded movements will be. However, a lower frame rate uses less HDD space. Make your choice depending on the precision with which you want to follow the events being recorded. Frame-rate of each channel can be adjusted but is limited by the total resources available. The total frame rate for all channels combined cannot exceed 420 (NTSC) fps. Note: Although the chipset is NTSC 480, part of the resources are used for other internal functions and cannot be allocated to recording resources. The ratios of D1, HD1 and CIF are as follows: 1 D1= 4 x CIF, 1 HD1 = 2 x CIF.
- AUDIO, select ENABLE or DISABLE. If audio recording is enabled, the system will record audio from connected audio capable cameras (not included). See caution statement on audio recording in **Video/Audio** section.
- REC. MODE, select POWER UP or TIMER RECORD. If you select POWER UP, the system will record continuously when the system is powered on. If you select TIMER RECORD, you have to set a recording schedule on the system.
- REC. SIZE (Record Size), select 15MIN, 30MIN, 45MIN, or 60MIN.  
NOTE: Record Size sets the file size for recorded video files on the system. Instead of recording data as one large file, the system will divide the data into blocks of 15, 30, 45, or 60 minutes. This makes the recorded data easier to search
- MASK FIELD lets you block a specific portion of a channel you do not want recorded or shown on the display screen. This can be useful if you need to conceal a sensitive area being captured by the camera. See next section for details.
- Click APPLY. Click OK in the REMARK window. Click EXIT.

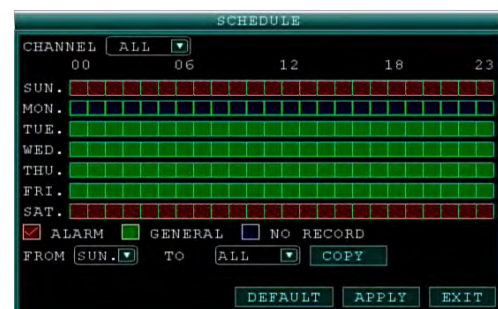


Basic Setup Menu



Record Menu

BITRATE IN Kbps			
IMAGE QUALITY	LOW	MEDIUM	HIGH
CIF	384	512	768
HD1	512	768	1024
D1	896	1024	1280



Recording Schedule



#### CCTV Resolution

CCTV resolution is measured in vertical and horizontal pixel dimensions and typically limited by the capabilities of both the camera and the recorder that you are using for your CCTV surveillance installation. CCTV systems use an analog video signal. For television specifications (which CCTV uses) the highest resolution that can be captured and stored is 704 x 480 (NTSC for the United States) and 720 x 576 (PAL for Europe). This resolution is known as D1 resolution. A high end CCTV recorder is capable of recording at up to D1 resolution.

#### CCTV Resolutions

D1: 704 x 480  
HD1 (2CIF): 704 x 240  
CIF: 352 x 240  
QCIF: 176 x 120

#### Motion Detect Setup

You can configure motion detection for each channel (Camera) connected to the DVR. To configure motion detection:

- From the Main Menu click ADVANCED. Then click MD (Motion Detect).
- Under STATUS, select ON to enable motion detection for the desired channel. Scroll down for additional channels. Note: If in the RECORD screen a Channel is set to OFF, MOTION is also disabled for that Channel
- Under SENSITIVITY, select 1 through 8. The higher the number, the more sensitive the motion detection.
- Under MD AREA SETUP, click SETUP. The red motion grid appears over the selected channel in full screen.
- Click the blocks in the grid to enable/disable motion detection. Red=motion detection enabled; Clear=motion detection disabled.
- Right-click anywhere on the screen to return to the Motion Detection menu.
- Click EMAIL, then select ON/OFF to turn on e-mail notification. E-mail must be configured. See manual for details.
- Click APPLY. Click CLOSE in the confirmation window.
- Click EXIT in all menus until all windows are closed.

NOTE: You can disable the MD buzzer in the Alarm Setup menu.

### STEP 7... PLAYBACK

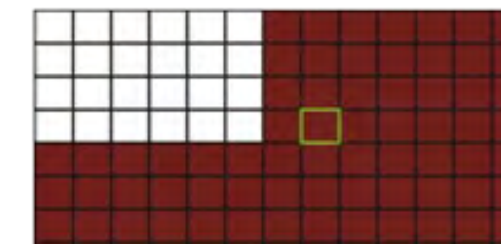
#### PLAYBACK Mode

View recorded video on the system through the Search Menu. To begin playback:

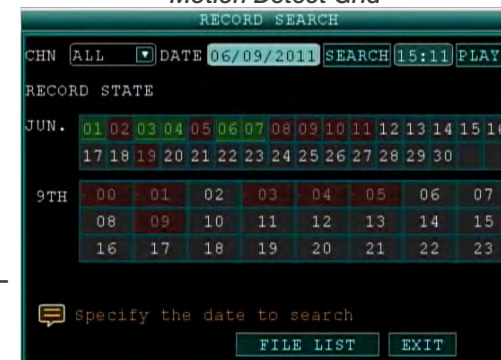
- Right-click anywhere on the screen and select VIDEO SEARCH from the Quick Access Menu. The Search Menu opens.  
NOTE: When you first open the Search Menu, it displays the current month and date.
- Click PLAY to playback the last minute of recorded video (Quick Search) OR Under CHN select a specific channel or select ALL.
- Under DATE, enter a date using the Virtual Keyboard (mouse only).
- Click SEARCH. Recorded events on the system appear in red (alarm events—includes both alarm and motion events) and green (normal recording).
- Click a date in the Month Grid to search for video files.
- Click a time block in the Hour Grid to view the video. Playback begins.
- Move the mouse slightly to display the on-screen playback controls. You can also use the playback control with buttons on the remote control or front panel of the system.



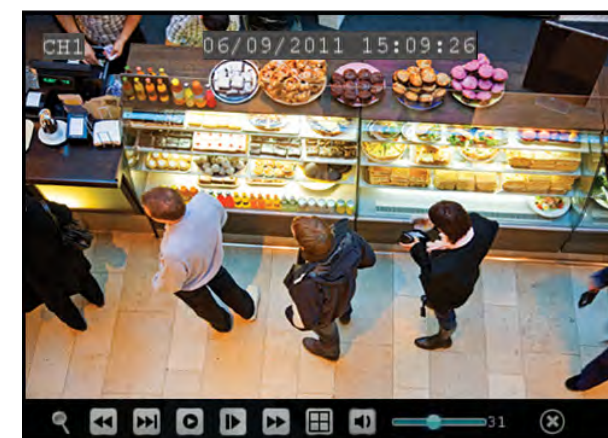
Motion Detect Menu



Motion Detect Grid



Record/Search Menu



On-screen Playback Controls

#### On-screen Playback Controls

To use the on-screen playback controls:

- Click the VCR-like controls to play, pause, fast forward, rewind, and slow down playback.
- Drag the slider to adjust the volume (audio capable camera required, not included). Select the box to mute the audio.
- Click X to quit playback and return to the Search menu.



Record State

Month Grid

Hour Grid

- Under RECORD STATE, the system shows recorded events in a Month Grid and a Time Grid. The selected day of the month will be outlined in red. Green=normal recording; Red=alarm recording (includes both alarm and motion events). Click a date in the month grid to view recorded video files for that selected date in the hour grid.

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M08-0387-002